



# Conserve O Gram

July 1993

Number 13/4

## Exhibit Mounting Variations For Objects On Paper

Paper objects should not be placed on long-term or *permanent* exhibition because of their sensitivity to light. When planning for the temporary display of documents, works of art on paper, and photographs, ensure that mounting techniques meet the following criteria:

- *Employ archival-quality construction materials.* Archival-quality materials are used for all surfaces that will come in contact with the mounted object, such as mounting boards, plastics, and adhesives. Commercial double-sided and archival tapes are not used in direct contact with museum objects, but they often can be used to adhere other surfaces within the mount.

To mount photographs, use neutral (pH 7), lignin-free mat boards and papers. Use lignin-free, buffered or alkaline-reserve mounting materials (pH 8 to 8.5) for paper documents. Check vendor catalog descriptions or request this information from the supplier.

- *Employ reversible techniques.* All techniques applied are reversible, that is, able to be fully undone.
- *Permit expansion and contraction.* Since paper is a hygroscopic material (that is, it takes on and gives off water in response to the humidity of its environment), a proper archival mounting technique allows the paper or photographic object to expand and contract without distorting or buckling.
- *Employ spacers.* Once mounted, the document, art work, or photograph does not touch

the framing glass or plastic, but is held apart from it by a window mat or spacer.

*Conserve O Gram* 13/1 describes one of the primary traditional mounting techniques, employing Japanese paper strips with wheat starch paste to hinge documents, photographs, or works of art to mat board. The following describes four alternative safe mounting methods: paper channel supports, archival photo corners, polyester strip supports, and polyester wrap.

### *Paper Channel Supports*<sup>1</sup>

**Suitability.** Versatile. May not be appropriate for large objects, especially those with narrow borders.

### Supplies and Equipment

- 4-ply pH neutral or buffered mat board
- pH neutral or buffered paper
- Neutral archival tape, pressure sensitive or water activated (e.g., Filmoplast<sup>®</sup>, or linen tape)
- Mat or utility knife

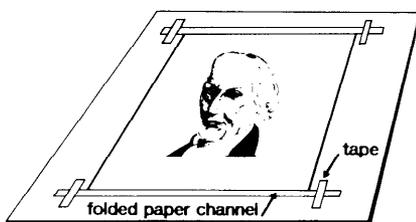
### Procedure

1. Cut a piece of 4-ply mat board (i.e., cut to fit the interior size of the frame) to serve as a back/mat for the object to be mounted.
2. Cut two strips of archival quality paper 3 to 4 inches longer than the horizontal dimension of the object to be mounted. To mount a letter-sized object, cut the strips 3/4 to 1 inch wide; for larger objects, cut them slightly wider.

3. Fold the paper strips in half along their length. Center the document or photograph on the mat board, inserting the top and bottom edges into the folded channels.



4. Close the paper channels and tape them to the mat board, placing the tape vertically across the ends of the channels. Allow space between the tape and the mounted object, for example, about 1/16th inch for a letter-sized object, and slightly more for a thicker or larger object.



5. Cut a window mat that covers the paper channels and hinge it to the back mat on the inside with tape for framing.
6. To remove the object safely, carefully slice the tape with a mat or utility knife to open the channels.

### Archival Photo Corners

**Suitability.** Appropriate for objects sturdy enough to support themselves. Inappropriate for brittle or large objects.

### Supplies and Equipment

- 4-ply neutral or buffered mat board
- Neutral or buffered paper, polyester or

polyethylene film, or ready-made archival photo corners

- Filmoplast, archival linen tape, or polyvinyl acetate (PVA) adhesive

### Procedure

Sturdy papers or photographs often can be mounted on mat board using photo corners constructed of polyester, polyethylene, or acid-free paper that are then attached to the back mat by an archival tape or PVA adhesive. These photo corners can be constructed following the instructions in *Conserve O Gram 14/1* or can be purchased ready-made from archival suppliers.

### Polyester Strip Supports

**Suitability.** Versatile. May be inappropriate for some brittle objects, as described. If used on any bowed objects, such as photographs mounted on bowed board, do not attempt to flatten by tightening the strips. Not suitable for friable media. (See page 3, *Polyester Wrap*.)

### Supplies and Equipment

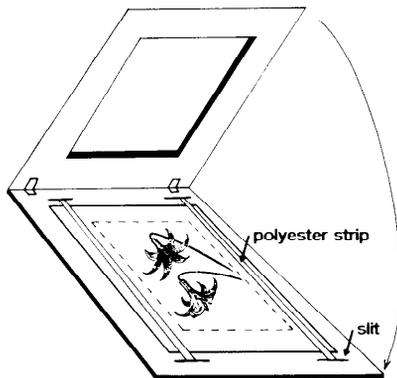
- 4-ply pH neutral or buffered mat board
- Strips of clear 1 or 2 mil polyester (Mylar® D or Melinex®)
- Linen tape for hinging the back and window mats. This tape does not touch the document, photograph, or work of art.
- Mat or utility knife

### Procedure

1. Place the paper to be framed on the back mat. Using a pencil, mark the back mat slightly above and slightly below the object, centering the marks in that portion of the object that will be covered by the window mat. For a small object, e.g., letter-sized, these marks might be 1/16th of an inch above and below. Increase the distance slightly for larger objects.

2. Remove the object and, using the mat or utility knife, cut a horizontal slit through the back mat at each of these marks.
3. Cut a strip of polyester. Lace it through a top and bottom slit, bring it around to the back of the back mat and tape it to the mat board with the linen or archival tape, keeping the strip snug but not taut. Do the same with a second piece, so that two vertical parallel strips of polyester are formed on the front of the back mat.

Because polyester can have sharp edges, select a different mounting technique or substitute polyethylene strips if the object being mounted is very brittle. Sources for polyethylene are more difficult to locate from archival suppliers, although some carry 1-2 mil polyethylene storage bags which can be cut up.



4. Turn the board face up. Place the object on the board, and gently insert first one side and then the other under the strips, centering the paper in the space provided.
5. Hinge the window mat to the back mat using the linen tape. The matted paper can now be inserted in a frame.

A similar plastic strip technique is sometimes used to exhibit open books, or objects such as a photograph on a cabinet mount, or a carte de visite, where the exhibit designer wants the

object's edges to show rather than being partially covered by the window mat. In this case, the window mat is cut larger than the object, and the strips are visible across the image. However, conservators have found this technique *unsatisfactory* for exhibition, because differential fading can occur upon extended exhibition, due to the blocking of light by the plastic, and to the reflection of light from the polyester strips to the adjacent surface.

### Polyester Wrap

**Suitability.** Do *not* use this technique to mount objects that have a friable medium, such as pastels, charcoals, or graphite pencil that could be damaged by the static charge of a plastic facing.

This technique is useful for mounting objects that will not be framed. It should be used only for objects that will be exhibited inside cases. This mounting method is suitable for temporary exhibition, but not for long-term storage. Plastic enclosures used long-term should permit more air exchange than polyester wrap.

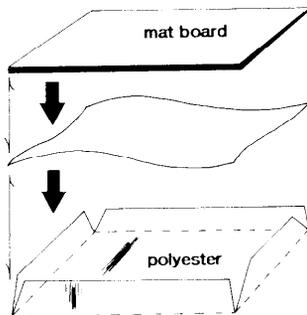
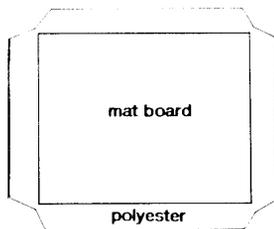
### Supplies and Equipment

- 4-ply neutral pH or buffered mat board
- Polyester sheeting (e.g. 3 mil Mylar)
- 3-M® #415 double-sided tape, or archival tape (e.g., Filmoplast or linen tape). This tape is applied only to the back of the mat board.
- A clean heavy object to serve as a weight, such as a book
- Mat or utility knife

### Procedure

1. Lay the document, work of art, or photograph on the mat board and mark the board just outside the dimensions of the object. For example, for a letter size object, allow 1/8th-inch leeway on each side. Set the object aside. Cut the mat board slightly larger than the dimensions of the object.

2. Cut a sheet of polyester 1 to 4 inches larger than the mat board in all directions, depending on the size of the object being mounted.
3. Center the mat board on the plastic and weight it. Mitre the corners of the plastic as illustrated. On a clean surface, lay the polyester out and wipe with a soft cloth to remove dust and finger prints.



4. Center the object to be mounted face down on the polyester. Place the mat board on top. Weight the mat board. Fold over the polyester flaps along two adjacent sides and tape them to the back of the board with double-sided or archival tape. Remove the weight and check for the proper positioning of the object. Tape the other two sides.

### Note

1. The paper channel support technique is taken from *Paper Conservation Catalog*, Book and Paper Group, American Institute for the Conservation of Historic and Artistic Works.

### Sources

The supplies mentioned above can be purchased from archival quality material suppliers, such as University Products, P.O. Box 101, South Canal Street, Holyoke, MA 01041, (413) 532-9431, and Light Impressions Corp., 439 Monroe Avenue, P.O. Box 940, Rochester NY 14603, (800) 828-6216.

Anne Jordan  
Curator  
Roosevelt-Vanderbilt NHS  
National Park Service  
Hyde Park, New York 12538

This *Conserve O Gram* was written with the assistance of the Department of Conservation, Paper Laboratory, National Museum of American History, Smithsonian Institution. Illustrations by William R. Jordan.

Formerly issued as *Conserve O Gram 13/7*. Revised 1993.

The *Conserve O Gram* series is published as a reference on collections management and curatorial issues. Mention of a product, a manufacturer, or a supplier by name in this publication does not constitute an endorsement of that product or supplier by the National Park Service. Sources named are not all inclusive. It is suggested that readers also seek alternative product and vendor information in order to assess the full range of available supplies and equipment.

The series is distributed to all NPS units and is available to non-NPS institutions and interested individuals by subscription through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, FAX (202) 512-2233. For further information and guidance concerning any of the topics or procedures addressed in the series, contact the National Park Service, Curatorial Services Division, Harpers Ferry, WV 25425, (304) 535-6410.